

Report on Prevention & Control of Pollution in River Maleni

An Action Plan for Rejuvenation



**Regional Office
M.P. Pollution control Board,
Ujjain (M.P.)**

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Action Plan for the Rejuvenation of River Maleni

1- Introduction:-

Jaora is a town and a municipality in Ratlam district in the Indian state of Madhya Pradesh. Jaora is located in the Malwa region, between Ratlam and Mandsaur. During the Mourning of Muharram, thousands of people from all over the world visit the shrine of Hussain Tekri. Jains visit Jaora as a place that the Jain ascetic Rajendrasuri practiced tapasya. As of the 2011 India census, Jaora had a population of 74,901

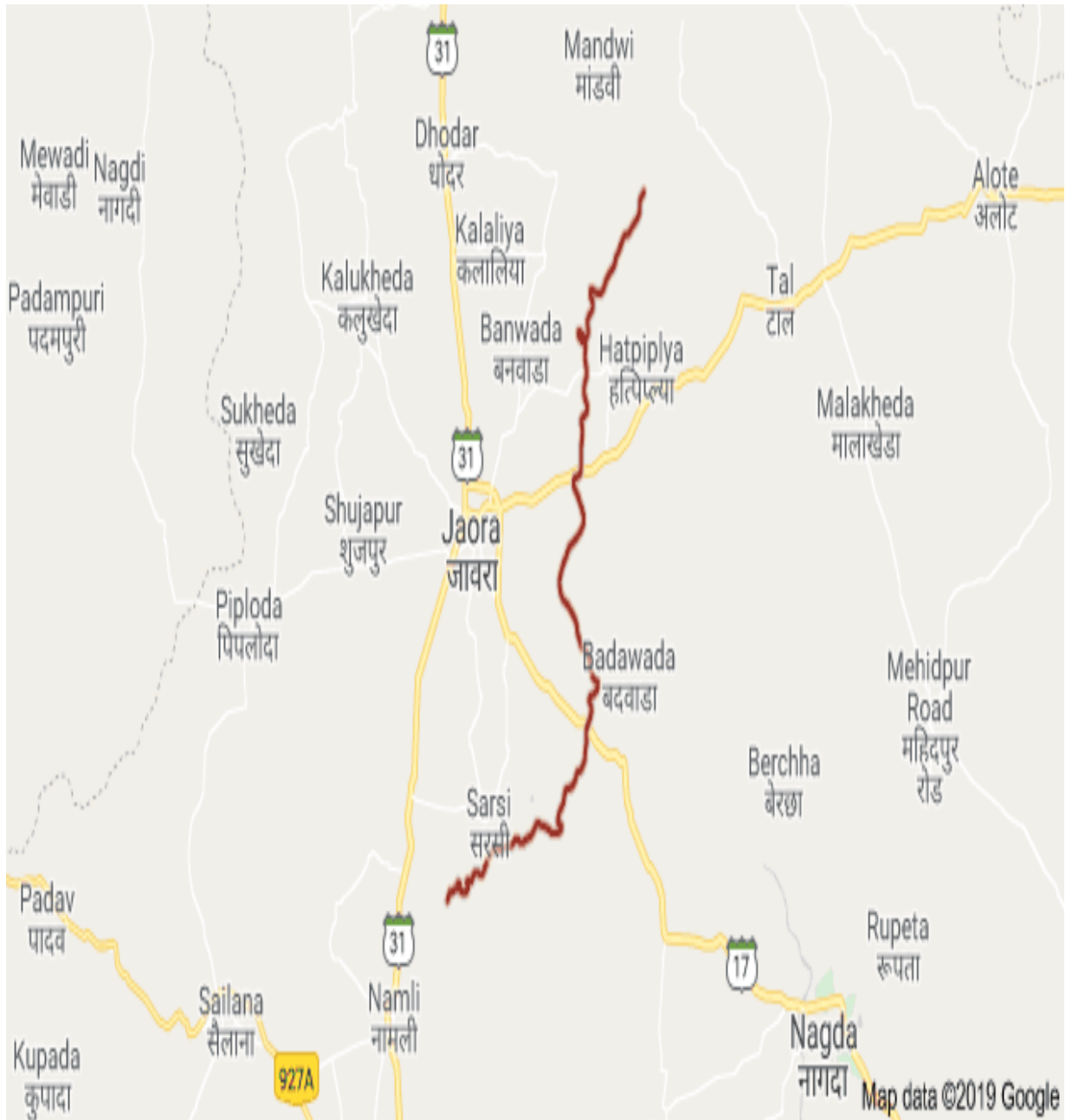
The state was founded by 'Abdu'l Ghafur Muhammad Khan, a Muslim of Afghan descent. He was a cavalry officer serving the Pindari leader Amir Khan. He later served the Holkar Maharaja of Indore, subduing Rajput territories in northern Malwa and annexing their lands. In return for his services, he was granted the title of Nawab in 1808. The state was confirmed by the British government in 1818 by the Treaty of Mandsaur.

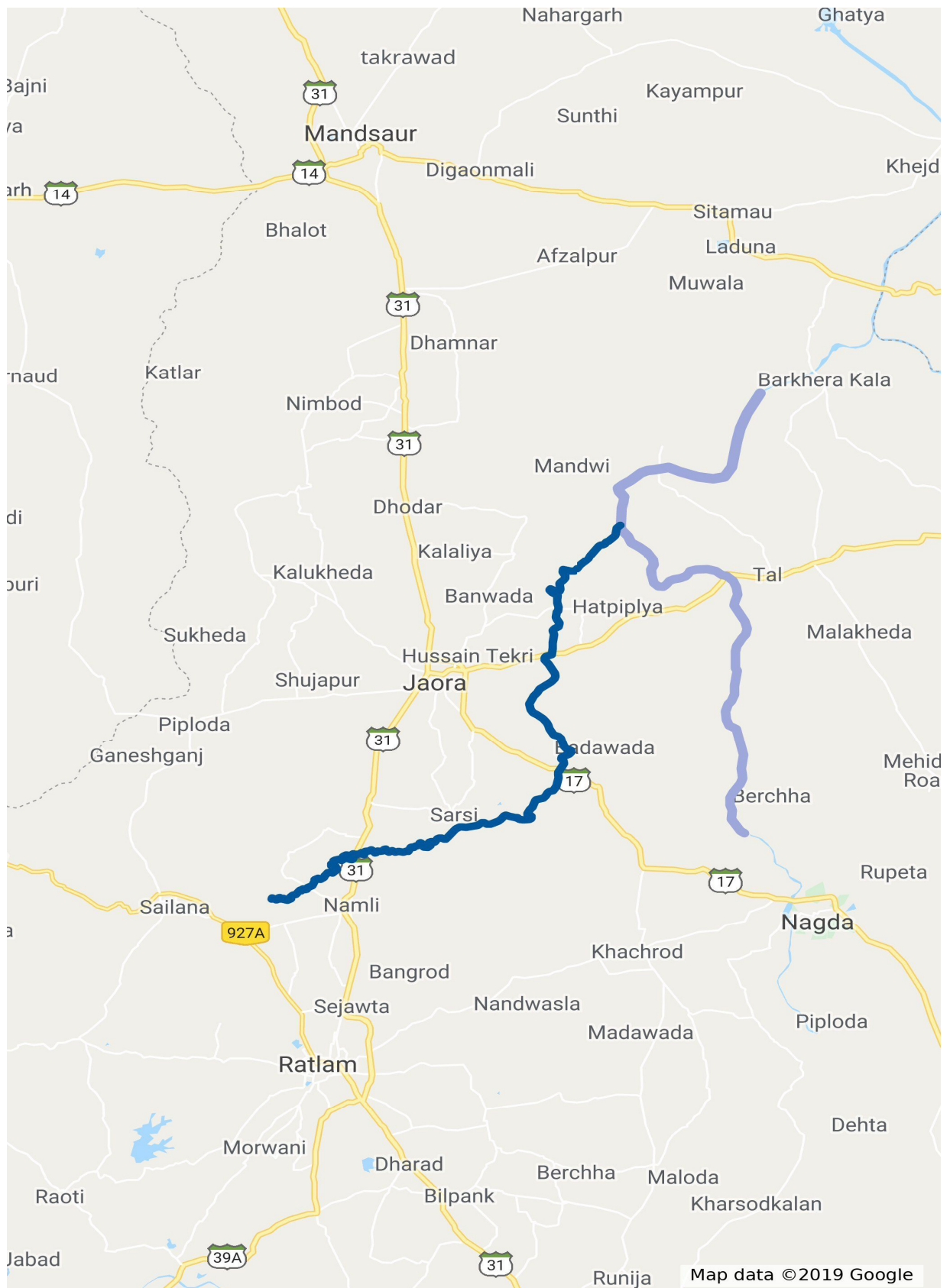
There are two city parks, Chota Baagh and Bada Baagh. The Hussain Tekri shrine on the edge of the town attracts thousands of visitors every year. Notable temples include the 200-year-old Radhakrishna temple, Manchapuram Hanuman temple, Jagnath Mahadev, Bada Mandir (Jain Temple), and Jain Dadawadi.

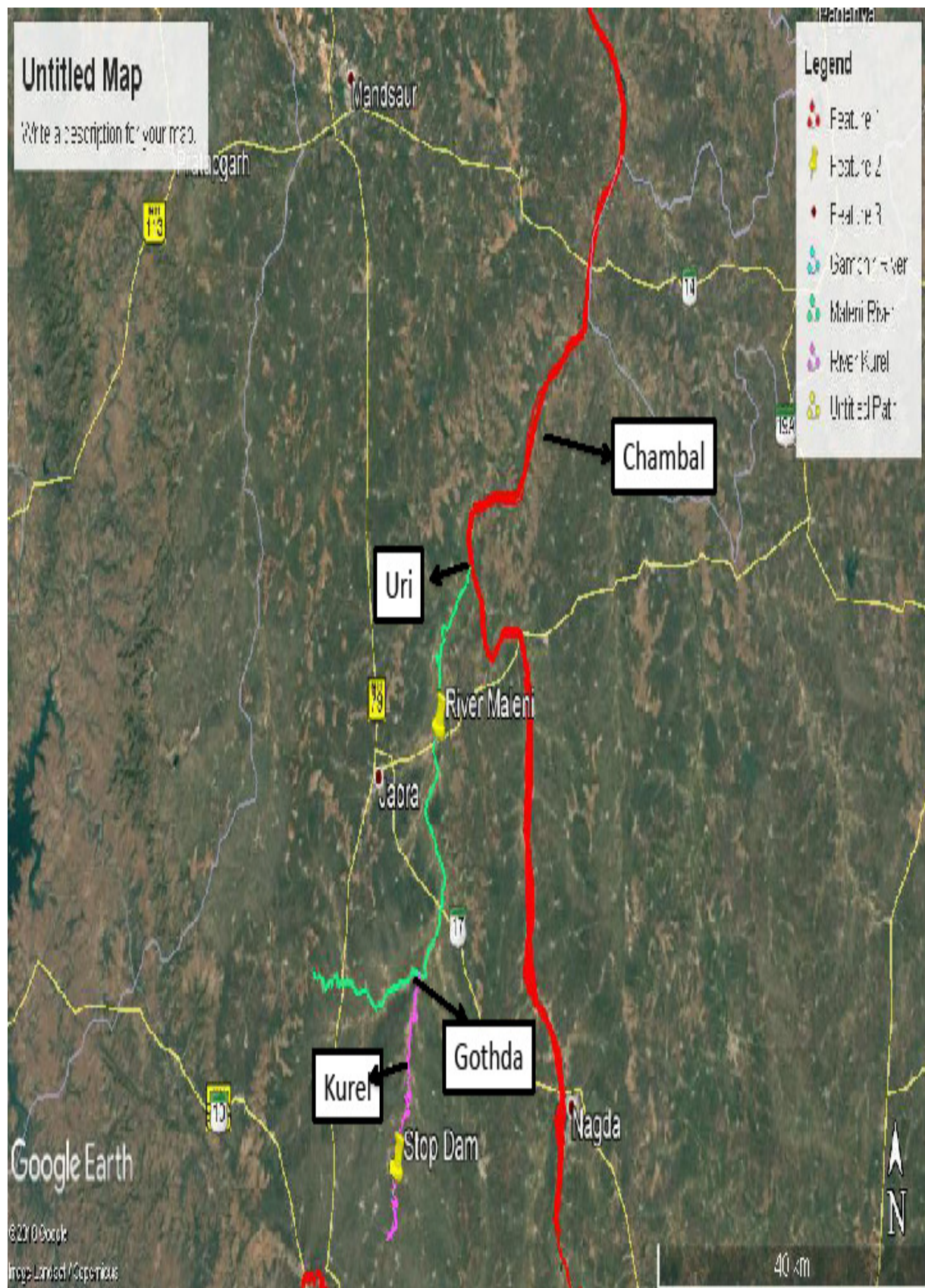
Jaora has a railway station on the Indian Railways network between Ratlam - Ajmer section. The Mhow-Neemuch state highway passes through Jaora. Jaora is 34 km from district HQ Ratlam. Buses provide access to the surrounding area.



River Maleni one of the major tributary of River Chambal originates near Sailana tehsil district Ratlam flow outskirts of Jaora town in east direction and after travelling about 80 K.M. mix with River Chambal near village Uni. River Maleni is a Non – Perennial River therefore water is to be stored for water supply of Jaora town. The water supplied to the Jaora town from the Bahadurpur Pumping Station on River Maleni and is situated 10 K.M. away from Jaora town.







1.1 Measure taken by government agency to control pollution in River Maleni:-

River Maleni is a Non – Perennial River therefore water is to be stored during rainy season for water supply of Jaora town. The water supplied to the Jaora town from the Bahadurpur Pumping Station on River Maleni and is situated 10 K.M. away from Jaora town.

River Kurel mix with River Maleni at 8 K.M. Upstream of Bahadurpur Pumping Station. In the past the major water polluting unit like, M/s Sajjan Chemical Ratlam (dye Unit) , M/s Ratlam alcohol & CO2 plant , Ratlam (distillery unit) and M/s Jayant Vitamin Ltd. Ratlam (Basic drug Unit) flows through Dosigaon Nallah and mix with River Kurel. Ultimately it cause water pollution in River Kurel and River Maleni. The court cases were filed against the defaulter industry & these industry were closed more than 15 years ago. Presently all the industry situated of the catchment river Kurel & Dosigaon industrial area are having ETP & are maintain ZLD . The Barrage is built on River Kurel after Dosigaon Nallah (stretch on nallah is 18 K.M. from Dosigaon industrial area) & its water use for drinking & agriculture purpose.

In Jaora town there is no underground water sewerage scheme only open drain are existing in the town. There are three nallah flowing through town. The Piliya Khal Nallah which runs from east to west, second nallah is situated towards north of the town while the Third Nallah is situated Tal Naka. The Piliya Khal Nallah it is flowing Heart of the town & town discharging most of the sewage in it. This Piliya Khal Nallah mix with the river Maleni after travelling 11 K.M. from Jaora town. The confluence point of the nallah is it the downstream of water supply intake point at Jaora town Bahadurpur Pumping Station.

Generally Piliya Khal Nallah water were found dry before confluence to River Maleni after winter season.



River Chambl after mixing river maleni at village –Uni

Therefore to improve the quality of river Maleni project has been prepared for the prevention of pollution & beautification work of Piliya Khal in

Jaora town at cost of Rs 868.89 Lakhs. The Municipal Council Jaora vide their letter no 427 Dated 29-04-2019 informed that the Project has got technical & administrative sanction from Chief Engineer Urban Administration & Development M.P. for laying of sewerage line & Sewerage treatment plant of 5 MLD capacity. The detail of proposed project & septage management plan is enclosed as per **Annexure – 1**.

Regional Office, Ujjain has issued letter to concerned government department in reference to NGT Case No. OA 673/2018 is enclosed as per **Annexure – 2**. & reply from the different stack holders Water Resources Department & Public Health Engineering Department is enclosed as per **Annexure - 3**

1.2 River stretch, major drains & flow :-

The River Maleni stretch Jaora declared by CPCB as polluted river stretches. Maleni River is Non- perennial river its flows only in rainy season & generally river found dry during summer season. There are three nallah flowing through town. The Piliya Khal Nallah which runs from east to west, second nallah is situated towards north of the town while the Third Nallah is situated Tal Naka. The Piliya Khal Nallah it is flowing Heart of the town & town discharging most of the sewage in it. This Piliya Khal Nallah mix with the river Maleni after travelling 11 K.M. from Jaora town. The 03 major nallah total flow about 4 MLD in the city which carries sewage water. Flow observed in Maleni River only in rainy season. Flow in river Maleni is normally 2 cumec.

1.3 Water usage:-

The water of Maleni River in upstream is used for drinking & irrigation. While in the downstream of river it's mainly used in irrigation purpose.

1.4 Characteristics at the river, ground water & major drain:-

Mostly the river Maleni quality is of IS 2296- 1982 Class 'B' Category. Result of Maleni River at water supply intake point at Bahadurpur pumping station is enclosed as per **Annexure -4**. Results of major tributary of river Maleni i.e. river Kurel is enclosed as per **Annexure - 5**. Result of major drain in Jaora Piliya Khal Nallah is enclosed as per **Annexure -6**. Similarly ground water sample were also collected in Jaora Town. The results of ground water sample from different location is enclosed as per **Annexure – 7**.

1.5 Sewerage generation & treatment details :-

The Piliya Khal Nallah it is flowing Heart of the town & town discharging most of the sewage in it. This Piliya Khal Nallah mix with the river Maleni after travelling 11 K.M. from Jaora town . The confluence point of the nallah is in the down stream of water supply intake point at Jaora town Bahadurpur Pumping Station. Therefore to improve the quality of river Maleni project has been prepared for the prevention of pollution & beautification work of Piliya Khal in Jaora town at cost of Rs 868.89 Lakhs. The Municipal Council Jaora vide their letter no. 427 Dated 29-04-2019 informed that the Project has got technical & administrative sanction from Chief Engineer Urban Administration & Development M.P. for laying of sewerage line & Sewerage treatment plant of 5 MLD capacity.

1.6 Health Status of the public in the catchment of the polluted river stretch :-

Municipal Council Jaora is presently supplying 6 MLD surface drinking water taken from river Maleni after proper treatment to the citizen of Jaora.

Hence the problem of water born disease cannot be co-related with the polluted river stretch. in River Maleni. Municipal Council has already issued public appeals & displayed the board in such identified tube wells & hand pumps whose water is not suitable for drinking.

No health impact issue reported from Health Department although regular health check up camp organized by Health Department at different places in and around Jaora Town.

1.7 Waste Management Status :

A. Industrial waste management – Ones known for its Sugar mill the town at present closed to nothing in terms of water polluting industry. At present there are a Soya extraction plant & flour mills .The negligible amount of treated industrial effluent generated from Jaora town.

B. Biomedical waste management- The total amount of Biomedical waste generated from Jaora town is about 0.7 MT /day. All hospital, Nursing Home & Pathology Lab of Jaora town taken membership from M/s Common Biomedical Waste Management system, Ratlam (Which is authorized by M.P.P.C.B.) for the disposal of Biomedical Waste.

C. Solid Waste Management- The total amount of Solid Waste generated from Jaora town is 5 Metric Ton /day & after Collection & Segregation is taken to trenching ground for further disposal

2- Proposed Short Term and Long Term Action plan for Rejuvenation of River Maleni:-

Sl.	Action plan for rejuvenation of river Maleni	Organisation/ Agency Responsible for Execution of the Action plan	Time Target	Present Status
1.	Industrial Pollution Control			
	(a) Inventorisation of the industries in the catchment area of River Maleni covering assessment on aspects relating to status of consents under water & Air Acts and Authorization, Effluent Generation, ETP capacities and final mode of effluent discharges	MPPCB	---	No water polluting industry are Situated in the catchment area of River Maleni
	(b) Action against the identified industries	MPPCB	---	No water polluting industry are Situated in the catchment area of River Maleni

	in operation without consents under water & Air Acts/Authorization under the H & OW (M& TM) Rules, 2016 as amended.			
	(c) Action against the industries not install ETP or ETPs exist but not operating or ETP outlet or treated effluent is not complying to the effluent discharge standards or norms	MPPCB	---	No water polluting industry are Situated in the catchment area of River Maleni
	(d) Action against the red cat. Industry for installation of OCEMS and not transferring data to CPCB and MPPCB	MPPCB	Within three month	In Jaora there is no such type of industry is situated which require OCEMS installation so it is not applicable.
	(e) Small scale/tiny and service providing	MPPCB	Within three	Notice served to different auto service station & asked to install minimum

	unit located in urban or semi urban limits like Auto service stations to have a minimum provision of O & G traps		month	provision of O & G traps.
	(f) Prohibition of Burning of any kind of waste including agro residues	State Govt. / District/ local Authorities	Within three month	Action already taken by local Administration for burning of waste.
	(g) Direction to all the industries which are observed to be not in operation or closed or temporarily closed to remain close till further order from MPPCB.	MPPCB	---	Action not required
	(h) Estimation of Industrial effluent generation and the existing CETP capacity and to arrive gap between	MPPCB	---	No water polluting industry are Situated in the catchment area of River Maleni.

	the industrial effluent generation and the existing treatment capacity			
	(i) Channelization of industrial effluent to CETPs for ensuring treatment to comply with the discharge standard	MPPCB /District Collector /DIC/Municipal Council Jaora	---	CETP not required
	(j) Identification of suitable site within Industrial estates, Execution and Commissioning of Adequate Capacity CETPs	State Government/ MPPCB /District Collector /DIC/Municipal Council Jaora.	---	CETP not required
II	Sewage Treatment And Disposal Plant			
	(a) District wise estimation of total sewage generation existing treatment capacities,	Municipal Council Jaora.	Tender were called & next action will be taken after	The 01 major nallha with total flow about 4 MLD in the city which carries sewage water. The Piliya Khal Nallah it is flowing

	quantum of disposal of sewage presently through drains and the gaps in sewage treatment capacity		Parliament Election	Heart of the town & town discharging most of the sewage in it. This Piliya Khal Nallah mix with the river Maleni after travelling 11 K.M. away from Jaora town. The confluence point of the nallah is in the downstream of water supply intake point of Jaora town at Bahadurpur Pumping Station. To improve the quality of river Maleni project has been prepared for the prevention of pollution & beautification work of Piliya Khal in Jaora town at cost of Rs 868.89 Lakhs The Municipal Council Jaora vide their letter no. 427 Dated 29-04-2019 informed that the Project has got technical & administrative sanction from Chief Engineer Urban Administration &
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				Development M.P. for laying of sewerage line & Sewerage treatment plant of 5 MLD capacity. Annexure - 1
	(b) To undertake measurement of flow of all the drains presently contributing pollution load in river Maleni and to formulate detailed project report (DPR) for each drain and corresponding town	Municipal Council Jaora.	Tender were called & next action will be taken after Parliyamant Election	The 01 major nallha with total flow about 4 MLD in the city which carries sewage water. The Piliya Khal Nallah it is flowing Heart of the town & town discharging most of the sewage in it. This Piliya Khal Nallah mix with the river Maleni after travalling 11 K.M. away from Jaora town. The confluence point of the nallah is in the downstream of water supply intake point of Jaora town at Bahadurpur Pumping Station. To improve the quality of river Maleni project has been prepared for the prevention

				of pollution & beautification work of Piliya Khal in Jaora town at cost of Rs 868.89 Lakhs The Municipal Council Jaora vide their letter no427 Dated 29-04-2019informed that the Project has got technical & administrative sanction from Chief Engineer Urban Administration & Development M.P. for laying of sewerage line & Sewerage treatment plant of 5 MLD capacity. Annexure -1
	(c) Proper design, execution of STPs with full utilisation capacity	Municipal Council Jaora.	Tender were called & next action will be taken after Parliyament Election	All the points are already covered in DPR.

	(d)	Channelization including diversion of sewage generated from household/town ship/villages to sewer lines/ interception of all the drains presently carrying sewage and for ensuring proper treatment through the upcoming STPs	Municipal Council Jaora.	Tender were called & next action will be taken after Parliament Election	All the points are already covered in DPR.
	(e)	Ensuring automobiles service station and Hotels/Restaurants particularly located on road side should have a treatment system	MPPCB and Local Authorities	Within three month	Notice issued for installation of control measures.

	and levy of fine case found violations.			
II I	Ground Water Quality			
	(a) Sealing of contaminated hand pumps and found to be unfit for drinking purpose by the public	State Government/PH ED/ Municipal Council Jaora.	---	Action not required
	(b) Supply of potable water to the affected communities in the identified critical blocks	State Government/PH ED/ CGWA	---	Action not required
	(c) Carrying assessment of ground water survey for quality and to identify over exploited	CGWB/ State Government/PH ED	---	Action not required
	(d) To conduct periodic surprise inspection of the industry to rule out any forceful	MPPCB	---	Action not required

	injection of industrial effluents into groundwater resources			
	(e) All the industry should be directed to obtain NOC from the CGWB and action against the unit in operation without obtaining of NOC from CGWA	MPPCB/ CGWA/ CGWB/PHED	---	Action not required
	(f) To ensure rain water harvesting by the industrial, commercial and other institutions and groundwater recharging with only clean water be encouraged by CGWA/ CGWB	CGWA/ CGWB/ CGWA/ PHED/Municipal Council Jaora.	Within three months	Condition of Rain water Harvesting is being incorporated in building permission issued by Municipal Council Jaora.
IV	Flood Plan Zone (FPZ)			
	(a) Plantation in	State Forest Department	Within	In this monsoon season about 200 trees

	Flood Plain Zone (FPZ)		three years	were planted in the Bank of Maleni River.
	(b) Checking encroachments in the FPZ of river Maleni	District/Local administration	Within two years	Encroachments in the FPZ of river Maleni has been already removed by local administration
	(c) Prohibition of disposal of municipal plastic and biomedical waste particularly in drains	Local administration	Within three months	<p>1. Biomedical waste management- The total amount of biomedical waste generated from Jaora Town is about 0.7MT. All hospital, Nursing Home & Pathology Lab of Jaora town taken membership from M/s Common Biomedical Waste Management system, Ratlam (Which is Authorized by M.P.P.C.B.) for the disposal of Biomedical Waste.</p> <p>2. Solid Waste Management- The total amount of Solid Waste generated from Jaora Town is 5 Metric Ton /day & after Collection & Segregation is taken to trenching ground for further processing.</p> <p>3. Polythene carry bags has been already Prohibited by the Local Administration</p>

	(d) Notification of Flood Plain Zone FPZ	State Government	Within three months	Detailed of Notification of Flood plain zone FPZ are desired from concerning agency
V	Environmental Flow (E-Flow) and Irrigation Practices			
	(a) Measurement of flow of river Maleni and records maintained	Water resource Department	With in three months	River Maleni is at present dry.
	(b) To conserve water and good irrigation practices to be adopted by the farmers by organizing mass awareness programmes and through media in vernacular language	M.P. Water resource Department and Agriculture Departments.	Regularly	To conserve water and good irrigation practices to be adopted by the farmers already organizing by concerning department for awareness

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